What is claimed is:

1. A pharmaceutical microsphere, comprising:

a bioactive agent; and

a biological carrier that encapsulates said bioactive agent, wherein the biological carrier is crosslinked with a crosslinking agent.

2. The pharmaceutical microsphere of claim 1, wherein the crosslinking agent is genipin, its analog, derivatives, and combination thereof.

3. The pharmaceutical microsphere of claim 1, wherein the crosslinking agent is selected from a group consisting of formaldehyde, glutaraldehyde, dialdehyde starch, glyceraldehydes, cyanamide, diimides, diisocyanates, dimethyl adipimidates, carbodiimides, epoxy compounds, and mixture thereof.

4. The pharmaceutical microsphere of claim 1, wherein the crosslinking agent is selected from a group consisting of dimethyl suberimidate, succinimidyls, acyl azide, ultraviolet irradiation, dehydrothermal treatment, tris(hydroxymethyl)phosphine, ascorbate-copper, glucose-lysine and photo-oxidizers.

5. The pharmaceutical microsphere of claim 1, wherein the biological carrier is selected from a group consisting of collagen, gelatin, elastin, chitosan, N, O, carboxylmethyl chitosan, and mixture thereof.

6. The pharmaceutical microsphere of claim 1, wherein the bioactive agent is selected from a group consisting of analgesics/antipyretics, antiasthamatics, antibiotics, antidepressants, antidiabetics, antifungal agents, antihypertensive agents, anti-inflammatories, antineoplastics, antianxiety agents, immunosuppressive agents, antimigraine agents, sedatives/hypnotics, antipsychotic agents, antimanic agents, antiarrhythmics, antiarthritic agents, antigout agents, anticoagulants, thrombolytic agents, antifibrinolytic agents, antiplatelet agents and antibacterial

agents, antiviral agents, antimicrobials, and anti-infectives.

7. The pharmaceutical microsphere of claim 1, wherein the bioactive agent is selected from a group consisting of actinomycin D, paclitaxel, vincristin, methotrexate, and angiopeptin, batimastat, halofuginone, sirolimus, tacrolimus, everolimus, tranilast, dexamethasone, and mycophenolic acid.

8. The pharmaceutical microsphere of claim 1, wherein the bioactive agent is selected from a group consisting of lovastatin, thromboxane A_2 synthetase inhibitors, eicosapentanoic acid, ciprostene, trapidil, angiotensin convening enzyme inhibitors, and heparin.

9. The pharmaceutical microsphere of claim 1, wherein the bioactive agent is selected from a group consisting of allicin, ginseng extract, flavone, ginkgo biloba extract, glycyrrhetinic acid, and proanthocyanides.

10. The pharmaceutical microsphere of claim 1, wherein the bioactive agent comprises biological cells.

11. The pharmaceutical microsphere of claim 1, wherein the bioactive agent comprises a growth factor.

12. A method for administering a pharmaceutical microsphere into a body of a patient comprising:

providing the pharmaceutical microsphere that comprises a bioactive agent and a biological carrier, said biological carrier encapsulating said bioactive agent, wherein the biological carrier is crosslinked with a crosslinking agent; and

delivering said pharmaceutical microsphere into the body of the patient.

13. The method of claim 12, wherein the crosslinking agent is genipin, its analog, derivatives,

and combination thereof.

14. The method of claim 12, wherein the crosslinking agent is selected from a group consisting of formaldehyde, glutaraldehyde, dialdehyde starch, glyceraldehydes, cyanamide, diimides, diisocyanates, dimethyl adipimidates, carbodiimides, epoxy compounds, dimethyl suberimidate, succinimidyls, acyl azide, ultraviolet irradiation, dehydrothermal treatment, tris(hydroxymethyl)phosphine, ascorbate-copper, glucose-lysine, photo-oxidizers, and mixture thereof.

15. The method of claim 12 further comprising a step of loading said pharmaceutical microsphere onto a medical device before the delivering step, wherein both of said pharmaceutical microsphere and said medical device are delivered into the body of the patient.

16. The method of claim 15, wherein the medical device is a stent.

17. The method of claim 15, wherein the medical device is a non-stent implant.

18. The method of claim 15, wherein the medical device is selected from a group consisting of annuloplasty rings, heart valve prostheses, venous valve bioprostheses, orthopedic implants, dental implants, ophthalmology implants, cardiovascular implants, and cerebral implants.

19. The method of claim 15, wherein the medical device is a percutaneous apparatus selected from a group consisting of a catheter, a wire, a cannula, and an endoscopic instrument.

20. The method of claim 12, wherein the biological carrier is selected from a group consisting of collagen, gelatin, elastin, chitosan, N, O, carboxylmethyl chitosan, and mixture thereof.